

## Section 1. Registration Information

### Source Identification

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Facility Name:	Advanced Biotech
Parent Company #1 Name:	Centrome, Inc.
Parent Company #2 Name:	

### Submission and Acceptance

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Submission Type:	First-time submission
Subsequent RMP Submission Reason:	
Description:	
Receipt Date:	10-Aug-2018
Postmark Date:	10-Aug-2018
Next Due Date:	10-Aug-2023
Completeness Check Date:	10-Aug-2018
Complete RMP:	Yes
De-Registration / Closed Reason:	
De-Registration / Closed Reason Other Text:	
De-Registered / Closed Date:	
De-Registered / Closed Effective Date:	
Certification Received:	

### Facility Identification

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EPA Facility Identifier:	1000 0022 0245
Other EPA Systems Facility ID:	
Facility Registry System ID:	

### Dun and Bradstreet Numbers (DUNS)

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Facility DUNS:	
Parent Company #1 DUNS:	830994182
Parent Company #2 DUNS:	

### Facility Location Address

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Street 1:	10 Taft Rd
Street 2:	
City:	Totowa
State:	NEW JERSEY
ZIP:	07512
ZIP4:	
County:	PASSAIC

### Facility Latitude and Longitude

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Latitude (decimal):	40.905529
Longitude (decimal):	-74.247826
Lat/Long Method:	GPS - Unspecified
Lat/Long Description:	Administrative Building
Horizontal Accuracy Measure:	5
Horizontal Reference Datum Name:	North American Datum of 1983
Source Map Scale Number:	

## Owner or Operator

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Operator Name:	Centrome Inc.
Operator Phone:	(973) 339-6242

## Mailing Address

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Operator Street 1:	10 Taft Road
Operator Street 2:	
Operator City:	Totowa
Operator State:	NEW JERSEY
Operator ZIP:	07512
Operator ZIP4:	
Operator Foreign State or Province:	
Operator Foreign ZIP:	
Operator Foreign Country:	

## Name and title of person or position responsible for Part 68 (RMP) Implementation

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RMP Name of Person:	Thomas DelMastro
RMP Title of Person or Position:	Vice President
RMP E-mail Address:	tdelmastro@adv-bio.com

## Emergency Contact

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Emergency Contact Name:	Thomas DelMastro, PhD
Emergency Contact Title:	Vice President
Emergency Contact Phone:	(973) 339-6242
Emergency Contact 24-Hour Phone:	(973) 466-0523
Emergency Contact Ext. or PIN:	N/A
Emergency Contact E-mail Address:	tdelmastro@adv-bio.com

## Other Points of Contact

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Facility or Parent Company E-mail Address:	info@adv-bio.com
Facility Public Contact Phone:	(973) 339-6242
Facility or Parent Company WWW Homepage Address:	<a href="http://www.adv-bio.com/">http://www.adv-bio.com/</a>

## Local Emergency Planning Committee

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LEPC:	Totowa Boro OEM
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## Full Time Equivalent Employees

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Number of Full Time Employees (FTE) on Site:	110
FTE Claimed as CBI:	

## Covered By

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OSHA PSM :	Yes
EPCRA 302 :	Yes
CAA Title V:	

Air Operating Permit ID:

## OSHA Ranking

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OSHA Star or Merit Ranking:

## Last Safety Inspection

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Last Safety Inspection (By an External Agency) Date:	09-Jul-2018
Last Safety Inspection Performed By an External Agency:	State occupational safety agency

## Predictive Filing

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Did this RMP involve predictive filing?:

## Preparer Information

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Preparer Name:	Pleasant Hill Consultants, Inc.
Preparer Phone:	(973) 927-0346
Preparer Street 1:	34 Pleasant Hill Rd.
Preparer Street 2:	
Preparer City:	Succasunna
Preparer State:	NEW JERSEY
Preparer ZIP:	07876
Preparer ZIP4:	
Preparer Foreign State:	
Preparer Foreign Country:	
Preparer Foreign ZIP:	

## Confidential Business Information (CBI)

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CBI Claimed:  
Substantiation Provided:  
Unsanitized RMP Provided:

## Reportable Accidents

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Reportable Accidents:	See Section 6. Accident History below to determine if there were any accidents reported for this RMP.
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## Process Chemicals

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Process ID:	1000039419
Description:	Storage, blending, pkging
Process Chemical ID:	1000047363
Program Level:	Program Level 3 process
Chemical Name:	Acetaldehyde
CAS Number:	75-07-0
Quantity (lbs):	100000
CBI Claimed:	
Flammable/Toxic:	Flammable

Process NAICS

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Process ID:	1000039419
Process NAICS ID:	1000039801
Program Level:	Program Level 3 process
NAICS Code:	325199
NAICS Description:	All Other Basic Organic Chemical Manufacturing

## Section 2. Toxics: Worst Case

No records found.

## Section 3. Toxics: Alternative Release

No records found.

Section 4. Flammables: Worst Case

Flammable Worst ID: 1000024429

Model Used:

EPA's RMP\*Comp(TM)

Endpoint used:

1 PSI

Passive Mitigation Considered

Blast Walls:

Other Type:

Section 5. Flammables: Alternative Release

Flammable Alter ID: 1000022851

Model Used:

EPA's RMP\*Comp(TM)

Passive Mitigation Considered

- Dikes:
- Fire Walls:
- Blast Walls:
- Enclosures:
- Other Type:

Active Mitigation Considered

- Sprinkler System:
- Deluge System:
- Water Curtain:
- Excess Flow Valve:
- Other Type:



## Section 6. Accident History

No records found.

## Section 7. Program Level 3

### Description

No description available.

### Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID:	1000040701
Chemical Name:	Acetaldehyde
Flammable/Toxic:	Flammable
CAS Number:	75-07-0
Process ID:	1000039419
Description:	Storage, blending, pkging
Prevention Program Level 3 ID:	1000034420
NAICS Code:	325199

### Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):	03-Jul-2018
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### Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):	03-Jul-2018
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### The Technique Used

What If:	
Checklist:	
What If/Checklist:	Yes
HAZOP:	Yes
Failure Mode and Effects Analysis:	
Fault Tree Analysis:	
Other Technique Used:	
PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):	03-Jul-2018

### Major Hazards Identified

Toxic Release:	Yes
Fire:	Yes
Explosion:	
Runaway Reaction:	
Polymerization:	
Overpressurization:	Yes
Corrosion:	
Overfilling:	Yes
Contamination:	
Equipment Failure:	Yes
Loss of Cooling, Heating, Electricity, Instrument Air:	Yes

Earthquake:	
Floods (Flood Plain):	Yes
Tornado:	
Hurricanes:	Yes
Other Major Hazard Identified:	

### Process Controls in Use

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Vents:	Yes
Relief Valves:	
Check Valves:	
Scrubbers:	Yes
Flares:	
Manual Shutoffs:	
Automatic Shutoffs:	
Interlocks:	
Alarms and Procedures:	Yes
Keyed Bypass:	
Emergency Air Supply:	
Emergency Power:	Yes
Backup Pump:	
Grounding Equipment:	Yes
Inhibitor Addition:	
Rupture Disks:	
Excess Flow Device:	
Quench System:	
Purge System:	
None:	
Other Process Control in Use:	

### Mitigation Systems in Use

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Sprinkler System:	Yes
Dikes:	
Fire Walls:	
Blast Walls:	
Deluge System:	
Water Curtain:	
Enclosure:	Yes
Neutralization:	
None:	
Other Mitigation System in Use:	High flow rate exhaust system

### Monitoring/Detection Systems in Use

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Process Area Detectors:	Yes
Perimeter Monitors:	
None:	
Other Monitoring/Detection System in Use:	

### Changes Since Last PHA Update

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Reduction in Chemical Inventory:	
Increase in Chemical Inventory:	Yes
Change Process Parameters:	

Installation of Process Controls:  
Installation of Process Detection Systems:  
Installation of Perimeter Monitoring Systems:  
Installation of Mitigation Systems:  
None Recommended:  
None:  
Other Changes Since Last PHA or PHA Update:

## Review of Operating Procedures

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Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures): 29-Jun-2018

## Training

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Training Revision Date (The date of the most recent review or revision of training programs): 28-Jun-2018

## The Type of Training Provided

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Classroom: Yes  
On the Job: Yes  
Other Training:

## The Type of Competency Testing Used

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Written Tests:  
Oral Tests:  
Demonstration: Yes  
Observation: Yes  
Other Type of Competency Testing Used:

## Maintenance

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Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures): 29-Jun-2018

Equipment Inspection Date (The date of the most recent equipment inspection or test): 29-Jun-2018

Equipment Tested (Equipment most recently inspected or tested): RMP Equipment is inspected each day of operation. All equipment inspected monthly

## Management of Change

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Change Management Date (The date of the most recent change that triggered management of change procedures): 09-Jul-2018

Change Management Revision Date (The date of the most recent review or revision of management of change procedures): 07-Mar-2018

## Pre-Startup Review

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Pre-Startup Review Date (The date of the most recent pre-startup review): 24-Jul-2018

## Compliance Audits

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Compliance Audit Date (The date of the most recent compliance audit): 09-Jul-2018

Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit): 08-Aug-2018

## Incident Investigation

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Incident Investigation Date (The date of the most recent incident investigation (if any)):  
Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):

## Employee Participation Plans

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Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans): 09-Jul-2018

## Hot Work Permit Procedures

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Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures): 06-Jan-2017

## Contractor Safety Procedures

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Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures): 11-Jan-2017

Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance): 19-Jul-2017

## Confidential Business Information

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CBI Claimed:

## Section 8. Program Level 2

No records found.

## Section 9. Emergency Response

### Written Emergency Response (ER) Plan

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Community Plan (Is facility included in written community emergency response plan?): Yes

Facility Plan (Does facility have its own written emergency response plan?): Yes

Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?): Yes

Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?): Yes

Healthcare (Does facility's ER plan include information on emergency health care?): Yes

### Emergency Response Review

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Review Date (Date of most recent review or update of facility's ER plan): 03-Jul-2018

### Emergency Response Training

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Training Date (Date of most recent review or update of facility's employees): 12-Feb-2018

### Local Agency

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Agency Name (Name of local agency with which the facility ER plan or response activities are coordinated): Totowa OEM

Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated): (973) 890-7300

### Subject to

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OSHA Regulations at 29 CFR 1910.38: Yes

OSHA Regulations at 29 CFR 1910.120: Yes

Clean Water Regulations at 40 CFR 112:

RCRA Regulations at CFR 264, 265, and 279.52: Yes

OPA 90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, or 30 CFR 254:

State EPCRA Rules or Laws: Yes

Other (Specify):

## Executive Summary

### Executive Summary - Acetaldehyde Storage and Handling

#### Acetaldehyde Storage and Handling

Acetaldehyde is handled as a liquid cooled to 50°F (approximately 20°F below its boiling point) to minimize vapor generation and the subsequent potential fire hazard. This sub-cooling is achieved by the use of the refrigerators within the facility. Incoming drums for acetaldehyde are pressure rated and certified to the pressure rating required for the material.

#### Security

Procedural and physical security measures are in place to deter, detect and delay a threat. The complete security plan is outlined and discussed in the Advanced Biotech Security Plan and is considered confidential. Some highlights of the plan include: adequate illumination of the site; fencing to prevent unauthorized entry, secured gates on off hours; surveillance cameras; limited door/gate access; controlled access levels throughout the facility; etc.

#### Summary of Security Plan

The facility is located on a roughly triangular property site. Its perimeter is fenced on the South side, bordered by the Signac Brook (aka Nuachtpunk Creek) on the Northeast side and Amtrak Right-of-Way on the Northwest side.

Site access security is maintained by a front gate which is locked during non-business hours. Facility access security is maintained via locked exterior personnel and shipping/receiving overhead doors. Visitors are required to enter through the front entrance and sign in with the receptionist. No unescorted visitors are permitted in the material storage, operations or production areas. Delivery and shipment drivers check in with their respective loading docks for access to loading docks.

The Diesel Fuel storage tank and shipping and receiving areas employ continuous evening lighting activated automatically by photoelectric sensors. This in combination with the fence serves to minimize the threat of vandalism in the tank area and the rest of the facility. Lighting also allows for evening detection of spills or leaks.

Exterior storage tanks are secured to prevent draining or spills due to vandalism.

The following is a list of some of the areas that are monitored 24/7/365 via a digital video camera system with long-term recording capability:

Front entrance gate

Property line/perimeter/Amtrak right-of-way

Front and rear employee parking areas

Emergency assembly area

Visitor parking area

Loading dock aprons/tertiary containment areas

Exterior access to shipping/receiving areas - overhead and personnel doors

Firewater tank and fire-retardant foam system building

Standby Generator and integral diesel fuel tank/containment

Carbon adsorption systems - fans/motors/dampers/ductwork

Exterior office doors; exterior operations area doors

Exterior emergency exits

Interior access to operations, shipping/receiving, DEA cage areas

Flammables drum rack

Production area - flammables handling

Display screens enable management personnel to continuously monitor these areas. The camera surveillance is also recorded for later review as needed.

#### Spill Prevention

Spill prevention and abatement means utilized at ABT include verified leak-proof container closures and valves, secondary containment infrastructure in all areas of the facility as well as spill kits and absorbent materials at strategic locations. The site operates with 'zero discharge' from Production, Pouring, QC Lab, Warehouse and Shipping/Receiving. The site is considered a major facility by the NJDEP and as such has a Discharge Prevention Containment and Countermeasure and a Discharge Cleanup and Removal Plan approved August 5, 2013 and reauthorized August 8, 2016.

#### HVAC and VOC Removal

Building heating, cooling and ventilation systems are sized to provide the appropriate air flow and velocities necessary for the flammability class of Acetaldehyde. Low point exhausts are located throughout the facility due to its 1.52 vapor density (Air = 1.0). Over 30,000 CFM of air flow is provided as an exhaust to two activated carbon adsorption systems which remove >99% of the VOC present.

#### Sprinkler and Fire Protection

ABT's facility is fully sprinklered at the correct density and coverage for the materials stored including Acetaldehyde. A separate



supplemental system is provided for the drum racks. The sprinkler system is sourced from an on-site carbon steel 100,000 gallon firewater tank. An additional 615 gallon tank contains a non-hazardous foam concentrate (Alcohol-Resistant Aqueous Film-Forming Foam) to improve the fire control and suppression capabilities of the sprinkler system.

#### Accidental Release Prevention and Response Policies and Procedures

Advanced Biotech, Inc. (ABT) has made an Executive Management commitment to prevent and control spills and releases demonstrated by implementation of a comprehensive Discharge Prevention and Countermeasure Plan (DPCC) and Discharge Cleanup and Removal (DCR) Plan. Substantial resources have addressed personnel training, accident/spill prevention and considerations for safety in the design, installation, operation and maintenance of equipment. Advanced Biotech, Inc.'s policy is to implement reasonable controls to prevent foreseeable releases of regulated substances for both worker and public safety. The following operating procedures specifically apply to the covered Acetaldehyde process (Attachment 7-A):

SOP 2 - Acetaldehyde Handling

SOP 11 - Chemical Control

SOP 46 - Mix and Fill

SOP 47 - Mixing Production Operations

SOP 55 - Products needing Ventilation

SOP 62 - Refrigeration and Refrigerated Products

SOP 79 - Acetaldehyde Blend Preparation

SOP 80 - Acetaldehyde Blend Filtration for Shipment

SOP 89 - Employee Participation Procedure (DPCC/DCR; PSM, RMP/TCPA)

#### Description of the Stationary Source and Regulated Substances

ABT is located on Taft Road in Totowa Borough, Passaic County, New Jersey and has one regulated substance, acetaldehyde. Acetaldehyde is purchased as a raw material. Some material is shipped directly to customers and some is custom weighed, blended, dispensed and repackaged for commercial sale.

#### Offsite Consequence Analysis

For ABT at, the potential worst-case toxic release scenario involves the entire contents of three pallets of 55 gallon Acetaldehyde drums. The Environmental Protection Agency's (EPA) RMP\*Comp model was used to determine that the distance to toxic/flammable endpoint for such a release is less than 0.1 miles and does not affect any public or environmental receptors. The storage facility is equipped with a tertiary containment to contain spills and prevent discharge to the environment.

#### Process Safety Information

ABT has developed a variety of technical documents that will be used to help maintain safe operation of the acetaldehyde operation. These documents address chemical properties and associated hazards, limits for key process parameters, specific chemical inventories, and equipment design basis/configuration information. Chemical-specific information, including exposure hazards, and emergency response/exposure treatment considerations are provided in safety data sheets (SDSs). Chemical storage containers and handling equipment for acetaldehyde storage and operations have been selected for chemical/physical compatibility meeting DOT and IMDG requirements.

ABT has written procedures that address various phases of operations, such as receipt, inspection/testing, storage, dispensing, use and packing/shipping. These procedures are used as a reference by experienced operators and provide a basis for consistent training of new operators. These procedures are periodically reviewed and maintained as current and accurate.

#### Training

To complement the written procedures for operations, Advanced Biotech, Inc. has implemented a specific training program for all employees potentially involved in working with acetaldehyde. All training is been documented for each operator, supervisors verify that the operators understood the training.

#### Maintenance

Advanced Biotech, Inc. has developed procedures to maintain its facilities in a safe operating condition. Maintenance personnel have received training on (1) an overview of the process, (2) safety and health hazards, (3) applicable maintenance procedures, (4) emergency response plans, and (5) applicable safe work practices to help ensure they can perform jobs in a safe manner.

#### Five-Year Accident History

Advanced Biotech, Inc. has no ACETALDEHYDE accidents in the past 5 years.

#### Emergency Response Program Information

Advanced Biotech, Inc. maintains a written emergency response program, which is in place to protect worker and public safety as well as the environment. Employees receive training in these procedures as necessary to perform their specific emergency response duties. The emergency response program is updated when necessary based on modifications made to the operations or the processes. The overall emergency response program for ABT is coordinated with the Local Emergency Planning Committee (LEPC).

#### Safety

Advanced Biotech, Inc. strives for continuous improvement in its safety programs. Including training employees to safely perform assigned tasks and encouraging employees to suggest changes or improvements that will help improve safety and performance. Preventative maintenance is performed to minimize the potential for unanticipated failure of operating equipment.

Advanced Biotech, Inc. continuously reviews and updates prevention program elements, including written operating procedures, mechanical integrity programs, and the emergency response plan. Recommendations identified during the process hazard review of the acetaldehyde equipment and procedures have been incorporated.